

## A NEW ELAPHRUS (COLEOPTERA, CARABIDAE)<sup>(1)</sup>

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### *Elaphrus torreyensis* Tanner, new species

FEMALE: FORM, robust, body more elongate than other species of this genus; color metallic green above, cupreous beneath on the metothorax, abdomen and proximal portions of the legs; tibia and tarsus dark reddish; labrum, mandibles and distal portions of palpi black; the eyes large and black; interorbital width 1.6 mm with a round central boss falling off towards and back of orbits; just back of the central boss is a depressed circular spot with deep punctures. HEAD, especially the depressions on the dorsal and front deeply punctured while the elevated portions and the gular area are practically free from punctation. Two pairs of setae, one pair on the lateral portion of the clypeus and the other on the median inner margin of the orbits. ANTENNAE shorter than in the *lecontei* complex, reaching only to the posterior third of the thorax. Articles 1 to 3 and the base of fourth glabrous, while the remaining seven segments are setiferous with two long setae on each segment; the third segment the longest one, being twice as long as the second. THORAX 2.6 mm wide, with a deep hour glass shaped depression, bordered with two round depressions filled with deep punctures; the margins and humeri deeply punctured; while the elevated discal portions are finely and sparsely punctured. ELYTRA 4.1 mm wide, with ocellate foveae violaceous in the center and from which a setae  $3/4$  mm long extends; 21 ocellate foveae on the left elytron and 25 on the right one. The whole surface is sparsely and finely punctured except on the inner humeri, where they are deeply and closely punctured similar to the contiguous thoracic areas. The ventral unpunctured except on the lateral portions of the first two abdominal segments and the episterna of the thorax; the episternum of the prothorax is rather closely and deeply punctured. Total body length 10 mm.

FEMALE GENITALIA: Valvifers and coxites larger and setae not so styliform as in *clairvillei* and *olivaceus*. (Fig. I.) An examination of many specimens shows that the female genitalia have a few distinctive characters. After studying

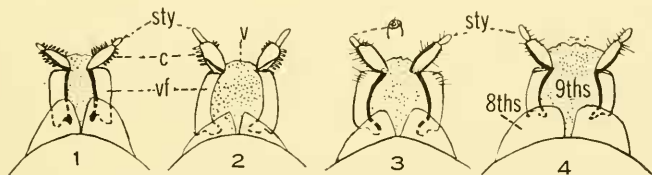


Fig. I. Female genitalia of 1. *Elaphrus clairvillei*; 2. *E. olivaceus*; 3. *E. torreyensis*; 4. *E. lecontei*. ((sty—stylus; c—coxite; vf—valvifer; v—vulva; 8ths—eighth sternite; 9ths—ninth sternite.)

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the genital structures of eight species of this genus it was possible to separate each one by certain small differences. The genitalia of four species are illustrated in this study.

TYPE LOCALITY: Torrey, Wayne County, Utah. Torrey is located on the Fremont River drainage, elevation 6,900 feet, near the west entrance to the Capital Reef Monument area. The holotype and a paratype, taken at Escalante, Garfield Co., both females, were collected by Wilmer W. Tanner in June, 1938. The holotype is in the Brigham Young University entomological collection and the paratype is being contributed to Dr. E. C. Van Dyke for the California Academy of Sciences collections. Dr. Van Dyke has been very kind in helping with the study of Utah Carabidae. I am indebted to him for two female specimens of *clairvillei* used in this study.

*Torreyensis* is most closely related to *clairvillei* from which it may be separated by a more robust form, size, coloration, and female genital characteristics. I have attempted to follow Col. Casey (1920-24) in his study of this genus, but find it difficult to agree with his conclusions. *E. spissicornis* from Parowan, Iron County, Utah, on the basis of specimens of *lecontei* from this and many other localities of Utah seems to be a synonym of *lecontei*. I am unable to distinguish any differences in the antennae of Utah specimens of *lecontei*. I have four specimens from Mr. F. S. Carr which he collected at Medicine Hat, Alta. (Choppice Lake) in August 22, 1927, labeled *E. devinctus* Csy., also specimens from Pingree Park, Colorado, which I am unable to separate from *lecontei*.